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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,750	10/01/2004	Joe Meyers	FGT1919PA	5749
28549	7590	12/10/2007		
Dickinson Wright PLLC 38525 Woodward Avenue Suite 2000 Bloomfield Hills, MI 48304			EXAMINER BEAULIEU, YONEL	
			ART UNIT 3661	PAPER NUMBER
			MAIL DATE 12/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/711,750

Applicant(s)

MEYERS ET AL.

Examiner

/Yonel Beaulieu/

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

Claim Objections

Claim 29 is objected to because of the following informalities: the preamble of claim 29 establishes "a [one] front wheel." At line 5 however, reference is made to "front wheels" which suggest a plurality of wheels. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 14, 16, and 18 - 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki (USP 5479348) in view of USP 6694225 B2 to Aga et al. ("Aga").

Regarding claims 1, 7, 9, 11, 13, 14, 16, 18 - 24, 26, 29, 30, and 31, Sasaki teaches controlling a vehicle with a 4x4 system, front, first and second wheels (5 – 8) and an active center differential (10) comprising transferring driving torque through electronically-controlled center differential (col. 4, lines 6 – 24 at least), braking an outside (outer) wheel of the vehicle (using item 22; col. 4, lines 39 – 42 at least), determining a slip condition and reducing or increasing (distributing) torque to the first wheel or the second wheel in response to the slip condition using the active differential (abstract; summary; col. 4, lines 5 - 10; col. 5, line 58 - col. 6, line 7; col. 7, line 44 - col.

8, line 32 at least); countering a deceleration caused by the braking event (col. 7, lines 34 – 43 at least), but fails to teach generating a rollover condition (including wheel lift) signal to prevent vehicle rollover.

However, Aga teaches, in the same field of endeavor of controlling a vehicle with a 4x4 driving system, generating a rollover condition (including wheel lift) signal to prevent vehicle rollover (title; abstract; summary; figs. 9A – 11; col. 7, line 23 – col. 8, line 65 at least).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Sasaki's teaching by generating a rollover condition, including wheel lift, signal to prevent vehicle rollover as evidenced by Aga in order to prevent the vehicle from impacting with an object upon a side portion of the vehicle; thus, enhancing safety.

Regarding claims 2, and 3, Aga further teaches transferring when a vehicle speed (col. 1, lines 18 – 33 and col. 18, lines 47 – 54 at least).

Regarding claims 4, 5, 8, and 12, Sasaki further teaches a throttle opening being below a threshold (col. 1, lines 1 - 8 at least).

Regarding claim 10, Sasaki further teaches reducing oversteer yawing (col. 1, lines 20 - 53; col. 7, line 6 - col. 8, line 9; col. 11, line 62 - col. 12, line 9)

Regarding claims 6 and 32 - 35, Aga further teaches determining a roll rate signal (by way of item 22), a lateral acceleration sensor (21), a vehicle speed sensor (24), and a yaw rate sensor (23; all as illustrated in fig. 1 at least).

Regarding claim 25, Aga further teaches balancing a weight transfer (determining the center of gravity; col. 5, lines 24 – 38 at least).

Both Sakaki (348) and Aga (225) are somewhat silent on applying engine torque and using a Torsen differential. However, this would have been obvious to one of ordinary skill in the art at the time of the invention as being old and well known in the field of controlling a vehicle with a 4x4 driving system (see for example USP 6579204).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Yonel Beaulieu/ whose telephone number is (571) 272-6955. The examiner can normally be reached on Mon., Wed. & Thur. between 0900 and 1600.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas BLACK can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yonel Beaulieu/
Yonel Beaulieu
Primary Examiner
Art Unit 3661